

US Claims

1. An emulsion composition, comprising an optically isotropic surfactant phase comprising a nonionic surfactant (hereinafter the phase being referred to as the surfactant phase), and an aqueous solution phase comprising an electrolytic salt (hereinafter the phase being referred to as the aqueous solution phase), the amount of the salt being such an amount that the aqueous solution phase is incompatible with the surfactant phase, wherein the surfactant phase and the aqueous solution phase are stabilized with a polymer comprising a segment (a) having affinity with the aqueous solution phase and a segment (b) having affinity with the surfactant phase (hereinafter the polymer being referred to as the emulsifier polymer).

2. The emulsion composition according to claim 1, wherein the surfactant phase is present as droplets in the aqueous solution phase.

3. The emulsion composition according to claim 1 or 2, wherein the content of the electrolytic salt in the emulsion composition is from 4 to 32% by mass.

4. The emulsion composition according to claim 1 or 2, wherein the content of water in the emulsion composition is 20% or more by mass.

5. The emulsion composition according to claim 1 or 2, wherein the content of the nonionic surfactant in the emulsion composition is 10% or more by mass.

6. The emulsion composition according to claim 1 or 2, which further comprises a water-soluble organic solvent which comprises a hydroxyl group.

7. The emulsion composition according to claim 1, wherein the emulsifier polymer is a block polymer or a graft polymer.

8. The emulsion composition according to claim 1 or 2, wherein the segment (a) of the emulsifier polymer is a polymer chain comprising, in its constituting unit, a carboxyl group or a salt thereof, and the segment (b) thereof is a nonionic polymer chain.

9. The emulsion composition according to claim 7, wherein the emulsifier polymer is a copolymer of an ester of a polyalkylene glycol and a vinyl monomer having a carboxyl group or a salt thereof, and a vinyl monomer having a carboxyl group or a salt thereof.

10. The emulsion composition according to claim 7, wherein the emulsifier polymer is a copolymer of a polyalkylene glycol ether having a reactive unsaturated group and a vinyl monomer having a carboxyl group or a salt thereof.

11. The emulsion composition according to claim 1 or 2, wherein the segment (a) of the emulsifier polymer is a polymer chain comprising, in its constituting unit, a carboxyl group or a salt thereof, and the segment (b) thereof is a hydrocarbon group having 9 to 30 carbon atoms.

12. The emulsion composition according to claim 1 or 2, wherein the mass ratio of the segment (a) to the segment (b) is from 30:70 to 95:5.

13. The emulsion composition according to claim 1 or 2, wherein the electrolytic salt is a carbonate of an alkali metal.
14. The emulsion composition according to claim 1 or 2, wherein the nonionic surfactant has an HLB of 9 to 16.
15. The emulsion composition according to claim 1 or 2, which has a viscosity (at 25 °C) of 3000 mBa or less.
16. The emulsion composition according to claim 1 or 2, which is for a detergent.
17. A liquid detergent composition comprising the emulsion composition according to claim 1 and inorganic builder particles dispersed in the emulsion composition.
18. The liquid detergent composition according to claim 17, wherein the inorganic builder particles comprise an aluminosilicate compound.
19. The liquid detergent composition according to claim 17 or 18, which has a viscosity (at 25 °C) of 3000 mBa or less.
20. A process for producing the liquid detergent composition according to claim 17 or 18, comprising the step of mixing an emulsion composition comprising the emulsifier polymer, the electrolytic salt, the nonionic surfactant and water with inorganic builder particles.